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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/621,948

07/17/2003

Herman Dietrich Dierks JR.

AUS920030470US1

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08/15/2006

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EXAMINER

PARK, ILWOO

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/621,948	DIERKS ET AL.	
	Examiner	Art Unit	
	Ilwoo Park	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see page 11, section IV to page 24, section V.B.iv, filed 5/31/2006, with respect to claims 1-20 have been fully considered and are persuasive. The 102 and 103 rejections of claims 1-20 have been withdrawn.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention is directed to non-statutory subject matter. Claims 17 and 18 are not limited to tangible embodiments. In view of Applicant's disclosure, specification page 18, lines 13-22, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., CD-ROM) and intangible embodiments (e.g., wireless communication). As such, the claims are not limited to statutory subject matter and are therefore non-statutory.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding the formula "length field = (ABS (frame size/CLS) + 1) \* CLS", firstly, the ABS function (the result of this absolute function producing a positive value) is redundant because the Examiner believes that the 'frame size' and 'CLS' are always positive values; thus, the 'length field' is always positive value with or without the ABS function. Further, the formula would be rewritten as "length field = frame size + CLS"; this cannot enable aligning the data with the cache line size if the frame size divided by the cache line size results in a remainder.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4-6, 9, 10, 12-14, and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al. [US 6,055,580].

As for claim 1, Chen et al teach a method in data processing system for transferring [col. 7, lines 62-65] data from a memory [e.g., main memory 104, cache 105] to a network adapter [network interface card 124], the method comprising: receiving [col. 7, lines 62-65] a request to transfer data in the memory to a network adapter; and setting a transfer size to align [col. 3, lines 21-25; col. 3, lines 42-45; col. 9, lines 43-59] the data with a cache line size if the amount of data to be transferred is unequal [col. 3,

lines 17-21] to the cache line size, wherein an amount of data is less than or equal to the transfer size.

6. As for claim 2, Chen et al teach the amount of data to be transferred is in a frame and has a frame size [col. 9, lines 43-59].

7. As for claim 4, Chen et al teach the cache line size is  $2^n$ , wherein  $n$  is a positive integer [col. 9, lines 29-30].

8. As for claim 5, Chen et al teach the data is transferred from the memory to the network adapter through a bridge chip [fig. 1].

9. As for claim 6, Chen et al teach a method in data processing system for transferring [col. 7, lines 62-65] data from a memory [e.g., main memory 104, cache 105] to a network adapter [network interface card 124], the method comprising:

identifying [col. 8, lines 48-54] a frame size for a transfer of the data from the memory to the network;

setting [col. 9, lines 49-51] a length equal to a cache line size;

if the frame size is divisible by a cache line size without a remainder, setting a valid data length equal to the length field [col. 3, lines 39-45]; and

if the frame size divided by the cache line size results in a remainder, setting a valid data length equal to the length field [col. 3, lines 39-45].

10. As for claims 9 and 14, Chen et al teach a method for transferring data from a memory to a network adapter [*supra*]. Accordingly Chen et al teach the means for performing this method. The present claim is rejected under the same basis.

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11. As for claims 10, 11, and 13, Chen et al teach the method for transferring data from a memory to a network adapter [*supra*]. Therefore, the present claims are rejected under the same basis

12. As for claims 17 and 18, Chen et al teach a method for transferring data from a memory to a network adapter [*supra*]. Accordingly Chen et al teach the computer program product for performing this method. The present claims are rejected under the same basis.

13. As for claims 19 and 20, Chen et al teach a method for transferring data from a memory to a network adapter [*supra*]. Therefore, Chen et al teach the server for performing this method. The present claims are rejected under the same basis.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 3, 8, 11, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. [US 6,055,580] in view of Webber et al. [US 6,820,186 B2].

As for claims 3, 8, 11, and 16, Chen et al do not explicitly disclose a valid length indicator is set to the amount of data wherein the network adapter outputs only the amount of data set by the valid length indicator after the data has been transferred to the network adapter. Webber et al teach transferring data [col. 1, lines 5-19] aligned with a cache line size from a memory to a network adapter in order to build a packet payload to

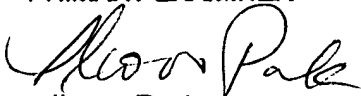
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be transmitted on a network and further teach a valid length indicator [col. 2, lines 30-41] is set to the amount of data wherein the network adapter outputs only the amount of data set by the valid length indicator after the data has been transferred to the network adapter. At the time the invention was made, one of ordinary skill in the art would have been motivated to combine the cited references in order to increase flexibility by providing a request beginning at arbitrary [Webber et al: col. 1, lines 5-19] location of a cache line rather than beginning at a starting address [Chen et al: col. 3, lines 8-11] of a cache line.

### **Conclusion**

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ilwoo Park whose telephone number is (571) 272-4155. The examiner can normally be reached on Monday through Friday from 9:00 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**ILWOO PARK**  
**PRIMARY EXAMINER**



Ilwoo Park

August 10, 2006